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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§	
Robert J. Laferriere et al.	§	Group Art Unit: 3713
	§	
Serial No.: 09/682,238	§	
	§	Examiner: Saadat, Cameron
Filed: August 8, 2001	§	
	§	
For: PLATFORM INDEPENDENT	§	Atty. Docket: GEMS:0136/YOD/SWA/EUB
TELECOLLABORATION MEDICAL	§	15-SV-5654
ENVIRONMENTS	§	

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APPEAL BRIEF PURSUANT TO 37 C.F.R. §§ 41.31 AND 41.37

This Appeal Brief is being filed in furtherance to the Notice of Appeal mailed on October 3, 2005, and received by the Patent Office on October 11, 2005.

The Commissioner is authorized to charge the requisite fee of $500.00 for this Appeal Brief, and any additional fees which may be necessary to advance prosecution of the present application, to Deposit Account No. 50-2402, Order No. 15-SV-5654/YOD (GEMS:0136). Further, in accordance with 37 C.F.R. § 1.136, Appellants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefor. Furthermore, Appellants authorize the Commissioner to charge the appropriate fee for any extension of time to Deposit Account No. 50-2402, Order No. 15-SV-5654/YOD (GEMS:0136).

1. **REAL PARTY IN INTEREST**

The real party in interest is General Electric Medical Technologies Services, Inc., the Assignee of the above-referenced application by virtue of the Assignment recorded at reel 013042, frame 0843, and recorded on July 2, 2002. General Electric Medical Technologies Services, Inc., the Assignee of the above-referenced application, as evidenced by the documents mentioned above, will be directly affected by the Board's decision in the pending appeal.

2. **RELATED APPEALS AND INTERFERENCES**

Appellants are unaware of any other appeals or interferences related to this appeal. The undersigned is Appellants' legal representative in this appeal.

3. **STATUS OF CLAIMS**

Claims 16-42 are currently pending, are currently under final rejection, and, thus, are the subject of this appeal. Claims 1-15 were previously canceled by Appellants, as discussed immediately below, and are not subject to the present appeal.

4. **STATUS OF AMENDMENTS**

Certain claims of the present application were amended subsequent to the Final Office Action mailed June 1, 2005. Particularly, Appellants canceled claims 1-15, which had been previously withdrawn from examination, to clarify the issues for appeal. As the Examiner noted entry of these amendments in the Advisory Action mailed August 30, 2005, Appellants respectfully submit that there are no outstanding amendments to be considered by the Board.

5. **SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention relates generally to collaborative computing systems and environments. *See* Application, page 1, lines 1-2. More particularly, the present invention relates to novel techniques for training, servicing, managing, and interacting with software, medical equipment and persons by sharing screen views in a collaborative

environment between remote computing systems and persons. *See id.* at page 1, lines 2-5. The present application contains three independent claims, namely claims 16, 28, and 34, all of which have been improperly rejected and, thus, subject to this appeal. The subject matter of these claims is summarized below.

With regard to the aspect of the invention set forth in independent claim 16, discussions of the recited features of claim 16 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a method for remotely training persons having a medical diagnostic imaging system, the method comprising providing a collaborative computing environment (e.g., 10) between a trainee and a remote trainer for a medical diagnostic imaging system (e.g., 84). *See, e.g., id.* at page 5, lines 3-21; page 12, lines 9-10. The collaborative computing environment includes a first computing system (e.g., 12) operated by the trainee and a second computing system (e.g., 14). *See, e.g., id.* at page 5, lines 4-6. The method further includes interactively instructing the trainee via the collaborative computing environment, wherein interactively instructing the trainee includes controlling the first computing system via the second computing system in an operating system-independent manner. *See, e.g., id.* at page 5, lines 8-31; page 12, lines 2-23; *see also* FIG. 6.

With further regard to the aspect of the invention set forth in independent claim 28, discussions of the recited features of claim 28 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a method for collaborating between remote computing environments, including a medical diagnostic imaging system, the method comprising initiating a link (e.g., 36) between a first (e.g., 12) and a second (e.g., 14) remote computing environment. *See, e.g., id.* at page 5, lines 4-6; page 7, lines 10-11. The method also includes sharing a graphical user interface (e.g., 54) with the first and second remote computing environment and collaboratively interacting with a medical diagnostic imaging system (e.g., 84) coupled to the first remote computing environment,

wherein the second remote computing environment interacts with the medical diagnostic imaging system via the first remote computing environment. *See, e.g., id.* at page 8, lines 10-13; page 12, lines 9-10; *see also id.* at page 5, lines 14-21; page 12, lines 2-23; FIG. 6.

Additionally, with respect to the aspect of the invention set forth in independent claim 34, discussions of the recited features of claim 34 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a system (e.g., 10) for collaboratively interacting between remote computing environments associated with a medical diagnostic imaging system. *See, e.g., id.* at page 5, lines 3-4. The system includes a first computing system (e.g., 12) coupled to a medical diagnostic imaging system (e.g., 84) and a second computing system (e.g., 14) remotely coupled to the first computing system via a network (e.g., 36). *See, e.g., id.* at page 5, lines 4-6; page 7, lines 10-11; page 12, lines 9-10. The system also includes a user interface (e.g., 54) shared by the first and second computing systems for collaboratively interacting with the medical diagnostic imaging system, wherein the second computing system interacts with the medical diagnostic imaging system by controlling the first computing system. *See, e.g., id.* at page 8, lines 10-13; *see also id.* at page 5, lines 14-31; page 12, lines 2-23; FIG. 6.

6. **SOLE GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Appellants respectfully urge the Board to review and reverse the Examiner's ground of rejection in which the Examiner rejected claims 16-42 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,514,085 to Slattery et al. ("the Slattery et al. reference") in view of U.S. Patent No. 6,608,628 to Ross et al. ("the Ross et al. reference").

7. **ARGUMENT**

As discussed in detail below, the Examiner has improperly rejected the pending claims. Further, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under Section 103. Accordingly, Appellants

respectfully request full and favorable consideration by the Board, as Appellants strongly believe that claims 16-42 are currently in condition for allowance.

Sole Ground of Rejection:

The Examiner improperly rejected claims 16-42 under 35 U.S.C. § 103(a) as unpatentable over the Slattery et al. reference in view of the Ross et al. reference. Appellants respectfully traverse this rejection.

Legal Precedent

First, the burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). The Examiner must provide objective evidence, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002).

Second, when prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the

combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

In view of this binding legal precedent, Appellants respectfully submit that the rejection provided in the Final Office Action mailed June 1, 2005, which is based upon fundamental mischaracterizations of both the present claims and the cited art, is improper and fails to establish a *prima facie* case of obviousness.

Deficiencies of the Rejection

Appellants respectfully note that the Slattery et al. and Ross et al. references, even considered in hypothetical combination, collectively fail to disclose each element of independent claims 16, 28, and 34, as well as the claims depending therefrom. Because the cited references fail to disclose each and every element of the present claims, the cited references cannot support a *prima facie* case of obviousness with respect to the instant claims.

A.   **Claims 16-22, 24, 25, and 27**

Independent claim 16 recites:

> A method for remotely training persons having a medical diagnostic imaging system, the method comprising:
>> providing a collaborative computing environment between a trainee
>>> and a remote trainer for a medical diagnostic imaging system, the collaborative computing environment comprising a first computing system operated by the trainee and a second computing system; and
>> interactively instructing the trainee via the collaborative computing
>>> environment, wherein interactively instructing the trainee includes controlling the first computing system via the second computing system in an operating system-independent manner.

Independent claim 16 recites features that are not present in the Slattery et al. and Ross et al. references. For instance, independent claim 16 recites "providing a collaborative computing environment ... comprising a first computing system operated by the trainee and a second computing system" and "controlling the first computing system *via the second computing system*" (emphasis added). Because this control feature is not disclosed in the Slattery et al. or Ross et al. references, these cited references cannot render the presently claimed subject matter obvious.

The Slattery et al. reference is generally directed to computer based training. Col. 1, lines 31-34. Notably, the Slattery et al. system includes a pod controller 24 for controlling a pod 26 that comprises one or more devices 40. Col. 3, lines 44-46; *see also* Figs. 1, 2, 3, 9, 10. The pod controller 24 includes a user communications module 304 that allows a user to connect to a device 40 via a user or student computer 28 or 1010, and a mentor communications module 306 that allows a mentor to monitor a student's control of a device 40, as well as allowing the mentor to independently control the device 40 for the student to monitor during a learning exercise through equipment 906 or instructor terminal 1012. Col. 4, lines 10-21; *see also* col. 7, line 40 – col. 8, line 32. In other words, the student and mentor can *watch* each other *separately control* the device 40. *See id.*

The Slattery et al. reference also discloses software that allows two users to collaborate (i.e., monitor *separate* control) over a network while interacting with a single program. Col. 7, lines 54-60. The reference states that the pod controller 24 may also include a wiretap 902, which allows a mentor to monitor the instructions the user is sending to a device 40 to ensure that the user or student is properly controlling the device. Col. 7, lines 40-54. Wiretap 902 permits the mentor to take control of the device 40 and allows the student to watch the instructions the mentor is sending to the device 40. Col. 7, line 65 – col. 8, line 5. It should again be noted, however, that in the Slattery et al. system, the mentor and the student computers each *separately* control a device 40. The mentor computer *does not* control a device 40 *through the student computer*.

Conversely, independent claim 16 clearly recites that the first computing system operated by the trainee is controlled by a second computing system. While the Slattery et al. reference discloses collaboration between a user and a mentor, and that either the instructor or the user may alternately control a device 40, the cited reference does not teach that the instructor can somehow control the student computer. As the instructor terminal *directly* controls device 40 independent of the student computer, the cited reference cannot be reasonably considered to disclose "controlling the first computing system [operated by the trainee] via the second computing system" as recited in independent claim 16. The Slattery et al. reference, therefore, fails to disclose each and every element recited in independent claim 16. Furthermore, the Ross et al. reference fails to obviate the deficiencies of the Slattery et al. reference. Consequently, these cited references, whether taken alone or in combination, cannot support a *prima facie* case of obviousness. Accordingly, Appellants respectfully stress that independent claim 16 and its dependent claims are patentable over the Slattery et al. and Ross et al. references.

In the Final Office Action, the Examiner noted that the Slattery et al. reference discloses a mentor communications module 306 that "permits a mentor to monitor and participate in controlling the user devices during a learning exercise." Col. 4, lines 17-25; *see also* Office Action mailed June 1, 2005, pages 6-7. Appellants do not necessarily disagree with this particular assertion. However, this assertion fails to address the noted deficiencies of the cited references. As noted above, the Slattery et al. reference teaches a virtual classroom in which each of a plurality of students 1010 can control user devices 1040. *See* FIG. 10 (illustrating a network in which the student and instructor terminals have direct access to the user devices independent of one another). As noted by the Examiner, a mentor can also control user devices 1040 via an instructor terminal 1012. Again, Appellants respectfully submit that, unlike the Slattery et al. reference, the present claims generally recite a second computing system that controls a first computing system of a trainee to interact with a medical diagnostic imaging system.

Even assuming, for the sake of argument, that student terminals 1010 and instructor terminal 1012 can be reasonably equated with the first and second computing systems, respectively, of the present claims, the instructor terminal of the Slattery et al. reference *does not control a student terminal* in order to interact with the user devices. Instead, as illustrated in FIG. 10 and described in the associated text, instructor terminal 1012 is connected to a network such that it can directly interface with devices 1040 and does not need to control the device *through* student terminal 1010. In other words, the student terminals 1010 and instructor terminal 1012 are each configured to *directly* control devices 1040. While students at student terminals 1010 can observe the mentor controlling the user devices via instructor terminal 1012, the instructor terminal 1012 does not rely on control of any one of the student terminals 1010 in order to interact with devices 1040. Indeed, each of the student terminals 1010 could be *completely removed* from the system without affecting control of the user devices 1040 by the instructor terminal 1012.

Additionally, in the Advisory Action mailed August 30, 2005, the Examiner cites a particular passage of the Slattery et al. reference to support his contentions that the cited reference somehow discloses the presently claimed subject matter. In full, the relevant passage states:

> FIG. 9 illustrates a block diagram of a pod controller 24 including a wiretap 902, according to an embodiment. As shown, the pod controller of this embodiment is connected to a user's network application program 32, such as TELNET, over a network connection 904 that preferably includes, referring back to FIG. 1, a communications link 14 from the CPE 12 to the firewall 16 and a connection from the firewall 16 to the pod controller 24 over communications link 18. Also connected to the wiretap 902 is a mentor's equipment 906 operating a network application 908, such as Telnet. *Through this mechanism, a mentor can monitor the instructions the user is sending to the user devices in the pod. As such, the mentor can "watch" what the user is doing, so that the mentor can ensure that the user is properly controlling the user device.* Various software and hardware can be used to implement the wiretap. For example, KIBITZ, a program available with the freeware package EXPECT, allows two users to collaborate over a network while interacting with a single program. Thus, by using one KIBITZ for each user device, everything the user types

can be seen by the mentor, and visa versa. Other programs with similar functionality may also be used to achieve this type of operation. The wiretap 902 may be implemented in the device communications, control, and multiplexor module 310 of the pod controller 24.

> *Additionally, this wiretap may permit the mentor to take control of the user devices in the pod so that the user can "watch" the instructions the monitor is sending to the user devices. Thus, the mentor can show the user how to correctly operate the user devices to perform a task.* In another embodiment, the wiretap may be connected to an Artificial Intelligence program that oversees the user's operation of the user devices.

Slattery et al., col. 7, line 40 – col. 8, line 5 (emphasis added). Appellants respectfully note that this passage merely reinforces that the mentor and student computers may watch each other control a user device, and that the control of the devices by either the user or student computer and the mentor computer is independent of the other. Appellants respectfully submit that a clearer understanding of the structure and operation of the Slattery et al. system may be obtained with reference to FIG. 9 of the cited reference in addition to the passage quoted above that describes this figure.

The Slattery et al. system includes a user or student computer 12 and a pod 26 of user devices 40. The student computer 12 controls devices 40 through a pod controller 24, which includes a wiretap 902. The wiretap 902 and pod controller 24 are connected to student computer 12 via a network application program 32, such as Telnet.[1] The system also includes a mentor computer or equipment 906 that similarly connects to the pod controller 24 and wiretap 902 via a network application 908. As emphasized above, this connection facilitates mentor control of the user devices 40 of pod 26, and allows student or user computer 12 to watch the commands sent by the mentor computer 906 to a device 40. Further, as also emphasized above in the cited passage, the wiretap 902 also

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[1] For the sake of clarity and to avoid any potential confusion, it should be noted that FIG. 9 of the Slattery et al. reference contains a typographical error with respect to the pod controller 24. Particularly, two elements of FIG. 9 are labeled with reference numeral 26. The lower occurrence of reference numeral 26 correctly corresponds to the pod of user devices 40. The upper occurrence of reference numeral 26, however, is incorrect, as it actually corresponds to the pod controller 24. Thus, the upper occurrence of reference numeral 26 should instead read 24.

allows the mentor to observe the instructions sent to a device 40 by the student computer 12. However, as the Board will appreciate, contrary to the Examiner's assertions, this cited passage does not disclose or suggest that the mentor computer 906 controls the user devices *by controlling the student computer 12.* Indeed, with reference to FIG. 9 in addition to the cited passage, it is apparent that the Examiner's contentions to the contrary are untenable.

Consequently, because the mentor computer 906 and instructor terminal 1012 do not *control* user computer 12 or student terminal 1010 in order to interact with devices 40 and 1040, the mentor computer 906 and instructor terminal 1012 cannot be reasonably equated with a second remote computing environment that "interacts with the medical diagnostic imaging system via the first remote computing environment." The Slattery et al. reference thus fails to disclose each and every element of the present claims. Further, the Ross et al. reference fails to obviate this deficiency. As a result, the Slattery et al. and Ross et al. references fail to support a *prima facie* case of obviousness with respect to the present claims.

For at least these reasons, Appellants respectfully request withdrawal of the rejection under 35 U.S.C. § 103 and allowance of claims 16-22, 24, 25, and 27.

B.   **Claim 23**

Appellants respectfully note that claim 23 depends from independent claim 16. As such, the Examiner's rejection of claim 23 is improper for the same reasons provided above with respect to independent claim 16, and these reasons and the arguments in support thereof are incorporated herein by reference. However, Appellants respectfully assert that the rejection of claim 23 is further improper because the art of record fails to disclose the subject matter recited in claim 23.

Dependent claim 23 recites "[t]he method of claim 16, wherein interactively instructing the trainee comprises remotely interacting with an operating system for the

medical diagnostic imaging system." In the Final Office Action, the Examiner based his rejection of this subject matter on a portion of the Slattery et al. reference that discloses the use of a program, such as KIBITZ, that allows the user and mentor to view what is typed into the computer of the other. Final Office Action mailed June 1, 2005, page 5; *see* Slattery et al., col. 7, lines 54-60. One skilled in the art, however, will appreciate that collaborative programs, such as KIBITZ, are not *operating* systems, and the cited reference makes no such suggestion. Further, the cited passage completely fails to mention *any* operating system, much less an operating system for a user device or medical diagnostic imaging system. Because the cited passage cannot be reasonably considered to disclose the subject matter of dependent claim 23, this passage cannot support a *prima facie* case of obviousness with respect to the instant claim.

For these reasons, among others, Appellants respectfully request withdrawal of the rejection under 35 U.S.C. § 103 and allowance of claim 23.

C.   **Claim 26**

Similarly, Appellants respectfully note that claim 26 also depends from independent claim 16 and that the rejection of claim 26 is improper for the same reasons provided above with respect to independent claim 16. These reasons and the supporting arguments therefor are incorporated herein by reference. Further, Appellants respectfully contend that rejection of claim 26 is also improper because the art of record fails to disclose the subject matter recited in claim 26.

Dependent claim 26 recites "[t]he method of claim 16, wherein interactively instructing the trainee comprises remotely responding to operation of the medical diagnostic imaging system." In the Final Office Action, the Examiner based his rejection of this subject matter on a single sentence of the Slattery et al. reference that states, in its entirety, "[t]he mentor communications module 306 permits a mentor to monitor and participate in controlling the user devices during a learning exercise." Slattery et al., col. 4, lines 17-19; *see* Final Office Action mailed June 1, 2005, page 5. While this sentence

may disclose monitoring the control of the user devices and participating in such control, this sentence does not disclose, teach, suggest, or even hint at *responding* to operations of the user device, or anything reasonably comparable to "responding to operation of the medical diagnostic imaging system," as recited by dependent claim 26. As the cited sentence fails to disclose the subject matter of dependent claim 26, this sentence cannot sustain the Examiner's improper rejection of the present claim.

For at least these reasons, Appellants respectfully request withdrawal of the rejection under 35 U.S.C. § 103 and allowance of claim 26.

D. **Claims 28-33**

Independent claim 28 recites:

> A method for collaborating between remote computing environments, including a medical diagnostic imaging system, the method comprising:
> > initiating a link between a first and a second remote computing environment;
> > sharing a graphical user interface with the first and second remote computing environment; and
> > collaboratively interacting with a medical diagnostic imaging system coupled to the first remote computing environment, wherein the second remote computing environment interacts with the medical diagnostic imaging system via the first remote computing environment.

Somewhat similar to claim 16 above, independent claim 28 recites first and second remote computing environments and a medical diagnostic imaging system wherein "the second remote computing environment interacts with the medical diagnostic imaging system *via the first remote computing environment*" (emphasis added). As discussed above with respect to independent claim 16, the arguments for which are incorporated herein by reference, the Slattery et al. reference teaches student and mentor computers that each *directly* and *independently* control a device through pod controller 24. However, as also discussed above, the user and mentor computers do not interact with the device through *each other*. Thus, the Slattery et al. reference does not disclose a

second remote computing environment that interacts with the medical diagnostic imaging system via a first computing environment as recited in the present claim. The Ross et al. reference again fails to obviate the deficiencies of the Slattery et al. reference. Because the cited references fail to disclose each and every element of independent claim 28, the present rejection of independent claim 28 and its dependent claims is improper.

For at least these reasons, among others, Appellants respectfully request withdrawal of the rejection under 35 U.S.C. § 103 and allowance of claims 28-33.

E.   **Claims 34-42**

Independent claim 34 recites:

> A system for collaboratively interacting between remote computing environments associated with a medical diagnostic imaging system, the system comprising:
>> a first computing system coupled to a medical diagnostic imaging system;
>> a second computing system remotely coupled to the first computing system via a network; and
>> a user interface shared by the first and second computing systems for collaboratively interacting with the medical diagnostic imaging system, wherein the second computing system interacts with the medical diagnostic imaging system by controlling the first computing system.

Likewise, independent claim 34 recites first and second computing systems and a medical diagnostic imaging system in which "the second computing system interacts with the medical diagnostic imaging system *by controlling the first computing system*" (emphasis added). As discussed above with respect to independent claims 16 and 28, the arguments for which are incorporated herein by reference, the Slattery et al. reference discloses student and mentor computers that control devices 40 independently of one another. Consequently, Slattery et al. fail to teach a second computing system interacting with a medical diagnostic imaging system by controlling the first computing system. The Ross et al. reference also fails to disclose such control. In short, the cited references simply fail to disclose each and every element of independent claim 34, including the

recited subject matter noted above. Accordingly, Appellants respectfully submit that the Slattery et al. and Ross et al. references cannot establish a *prima facie* case of obviousness with respect to the presently recited subject matter.
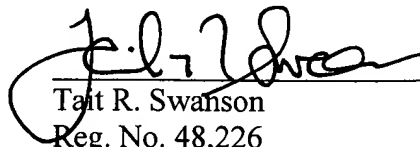
For at least these reasons, Appellants respectfully request withdrawal of the rejection under 35 U.S.C. § 103 and allowance of claims 34-42.

Conclusion

In view of the above remarks, Appellants respectfully submit that the Examiner has provided no supportable position or evidence establishing a *prima facie* case of obviousness with respect to claims 16-42. Consequently, Appellants respectfully submit that all pending claims are in condition for allowance. Accordingly, Appellants respectfully request that the Board withdraw the improper obviousness rejection of claims 16-42 and that the Board direct the Examiner to allow the instant claims. However, if the Examiner or Board wishes to resolve any other issues by way of a telephone conference, the Examiner or Board is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: <u>December 12, 2005</u>

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8.   **APPENDIX OF CLAIMS ON APPEAL**

Listing of Claims:

16.   A method for remotely training persons having a medical diagnostic imaging system, the method comprising:

> providing a collaborative computing environment between a trainee and a remote trainer for a medical diagnostic imaging system, the collaborative computing environment comprising a first computing system operated by the trainee and a second computing system; and

> interactively instructing the trainee via the collaborative computing environment, wherein interactively instructing the trainee includes controlling the first computing system via the second computing system in an operating system-independent manner.

17.   The method of claim 16, wherein providing the collaborative computing environment comprises interacting with a UNIX operating system.

18.   The method of claim 16, wherein providing the collaborative computing environment comprises providing a shared user interface.

19.   The method of claim 18, wherein providing the shared user interface comprises capturing, transmitting and caching screen data between computing systems for the trainee and the trainer.

20. The method of claim 18, wherein providing the shared user interface comprises providing mutual operability of an application configured for training the trainee.

21. The method of claim 18, wherein providing the shared user interface comprises simulating a graphical user interface for the medical diagnostic imaging system.

22. The method of claim 21, wherein simulating the graphical user interface comprises:

capturing screen data for a display of the medical diagnostic imaging system; and

transmitting the screen data to a remote display of the remote trainer.

23. The method of claim 16, wherein interactively instructing the trainee comprises remotely interacting with an operating system for the medical diagnostic imaging system.

24. The method of claim 23, wherein remotely interacting with the operating system comprises platform-independently interacting with the operating system.

25. The method of claim 16, wherein interactively instructing the trainee comprises remotely initiating events in the medical diagnostic imaging system.

26. The method of claim 16, wherein interactively instructing the trainee comprises remotely responding to operations of the medical diagnostic imaging system.

27.   The method of claim 16, wherein interactively instructing the trainee comprises remotely interacting with a plurality of geographically separate trainees via the collaborative computing environment.

28.   A method for collaborating between remote computing environments, including a medical diagnostic imaging system, the method comprising:

    initiating a link between a first and a second remote computing environment;

    sharing a graphical user interface with the first and second remote computing environment; and

    collaboratively interacting with a medical diagnostic imaging system coupled to the first remote computing environment, wherein the second remote computing environment interacts with the medical diagnostic imaging system via the first remote computing environment.

29.   The method of claim 28, wherein initiating the link comprises communicating between a plurality of distinct operating systems for the remote computing environments.

30.   The method of claim 28, wherein sharing the graphical user interface comprises providing independent and mutual control of an application associated with the graphical user interface.

31.   The method of claim 28, wherein sharing the graphical user interface comprises:

    capturing screen data for a first display of the first remote computing environment; and

transmitting the screen data to a second display of the second remote computing
environment.

32.   The method of claim 31, wherein sharing the graphical user interface
comprises caching the screen data on a memory assembly.

33.   The method of claim 28, wherein collaboratively interacting with the
medical diagnostic imaging system comprises collaborating operations with a plurality of
persons operating the remote computing environments.

34.   A system for collaboratively interacting between remote computing
environments associated with a medical diagnostic imaging system, the system comprising:

a first computing system coupled to a medical diagnostic imaging system;

a second computing system remotely coupled to the first computing system via a
network; and

a user interface shared by the first and second computing systems for collaboratively
interacting with the medical diagnostic imaging system, wherein the second
computing system interacts with the medical diagnostic imaging system by
controlling the first computing system.

35.   The system of claim 34, wherein the user interface comprises a graphical
interface operable on one of the first and second computing systems.

36.   The system of claim 35, wherein the graphical interface is simulated on a
different one of the first and second computing systems.

37.   The system of claim 36, wherein the first computing system comprises an application providing the graphical interface and the second computing system comprises a simulation of the graphical interface.

38.   The system of claim 37, wherein the simulation comprises screen data corresponding to the graphical interface.

39.   The system of claim 37, wherein the user interface facilitates mutual control of the application by both the first and the second computing systems.

40.   The system of claim 37, wherein the user interface facilitates real time shared operability of the medical diagnostic imaging system.

41.   The system of claim 40, comprising a safety routine to prevent undesirable operation of the medical diagnostic imaging system.

42.   The system of claim 40, comprising a cache memory assembly coupled to the network for caching screen data for the user interface.

9.   **APPENDIX OF EVIDENCE**

N/A

10.   **APPENDIX OF RELATED PROCEEDINGS**

N/A